

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1-28 and ADD new claims 29-30 in accordance with the following:

Claim 1 (Currently Amended): A method of using a write-once disc comprising at least one recording layer, the method comprising:
allocating at least one spare area to a data area of the at least one recording layer; and
dividing the at least one spare area into a sub spare area and a temporary disc management area,
wherein the size of the temporary disc management area is greater than or equal to $1/N$ (where N is a real number) of the size of the spare area.

Claim 2 (Currently Amended): The method ~~of~~ as claimed in claim 1, wherein the size of the temporary disc management area is less than or equal to $1/N$ of the maximum size allocable to the spare area.

Claim 3 (Currently Amended): The method ~~of~~ as claimed in claim 1, further comprising:
~~extending the sub spare area in the a direction opposite to that in which the user data is recorded, to be less than or equal to N times the size of the temporary disc management area so~~
that the sum of the sizes of the extended sub spare area and the temporary disc management area is less than or equal to N times the size of the temporary disc management area.

Claim 4 (Currently Amended): The method ~~of~~ as claimed in claim 1, further comprising:

reducing the sub spare area in ~~the~~a direction in which the user data is recorded.

Claim 5 (Currently Amended): The method ~~efas claimed in~~efas claimed in claim 1, wherein each spare area is an area in which the user data is re-recorded, or updated file system information is recorded when the user data recorded in a user data area has a defect.

Claim 6 (Currently Amended): The method ~~efas claimed in~~efas claimed in claim 1, wherein the temporary disc management area is an area used to record information on temporary defect management and temporary disk management, including in which a temporary disc definition structure is recorded~~indicating defective positions~~.

Claim 7 (Currently Amended): The method ~~efas claimed in~~efas claimed in claim 1, wherein N is 4.

Claim 8 (Currently Amended): A data recording and/or reproducing apparatus comprising:

a recording and/or reading unit which records data on and/or reads data from a write-once disc comprising at least one recording layer; and

a controller which allocates at least one spare area to a data area of the at least one recording layer, divides the at least one spare area into a sub spare area and a temporary disc management area, and controls the recording and/or reading unit to record information on position and/or size of each spare area and information on position and/or size of the sub spare area and the temporary disc management area on the write-once disc,

wherein the ~~controller determines the size of the temporary disc management area to be~~is greater than or equal to 1/N of the size of one spare area.

Claim 9 (Currently Amended): The data recording and/or reproducing apparatus ~~efas claimed in~~efas claimed in claim 8, wherein the controller determines the size of the temporary disc management area to be less than or equal to 1/N of the maximum size allocable to one spare area.

Claim 10 (Currently Amended): The data recording and/or reproducing apparatus ~~efas claimed in~~efas claimed in claim 8, wherein the controller ~~extends the sub spare area in the a direction opposite to that in which the user data is recorded, to be less than or equal to N times of the size~~

of the temporary disc management area extends the sub spare area so that the sum of the sizes of the extended sub spare area and the temporary disc management area is less than or equal to N times the size of the temporary disc management area, and controls the recording and/or reading unit to record information on the size of the extended sub spare area on the write-once disc.

Claim 11 (Currently Amended): The data recording and/or reproducing apparatus efas claimed in claim 8, wherein the controller reduces the sub spare area in thea direction in which the user data is recorded, and controls the recording and/or reading unit to record information on the size of the reduced sub spare area on the write-once disc.

Claim 12 (Currently Amended): The data recording and/or reproducing apparatus efas claimed in claim 8, wherein each spare area is an area in which the user data is re-recorded or updated file system information is recorded when the user data recorded in a user data area has a defect.

Claim 13 (Currently Amended): The data recording and/or reproducing apparatus efas claimed in claim 8, wherein the temporary disc management area is an area in which a temporary disc definition structure is recorded.

Claim 14 (Currently Amended): The data recording and/or reproducing apparatus efas claimed in claim 8, wherein N is 4.

Claim 15 (Currently Amended): A single recording layer write-once disc on which user data is recorded from the inside out, comprising:
a recording layer which comprises a data area,
wherein the data area comprises: a spare area which is allocated to an area ranging from a predetermined position of the data area to the last position of the data area and which is divided into a sub spare area and a temporary disc management area from the inside out, and
wherein the size of the temporary disc management area is greater than or equal to $1/N$ (N is a real number) of the size of the spare area.

Claim 16 (Currently Amended): The single recording layer write-once disc ~~of~~as claimed in claim 15, wherein the size of the temporary disc management area is less than or equal to $1/N$ of the maximum size allocable to the spare area.

Claim 17 (Currently Amended): The single recording layer write-once disc ~~of~~as claimed in claim 15, wherein the sub spare area is an area which is extended inward ~~to be less than or equal to N times the size of the temporary disc management area~~ so that the sum of the sizes of the extended sub spare area and the temporary disc management area is less than or equal to N times the size of the temporary disc management.

Claim 18 (Currently Amended): The single recording layer write-once disc ~~of~~as claimed in claim 15, wherein the sub spare area is an area which is reduced outward.

Claim 19 (Currently Amended): The single recording layer write-once disc ~~of~~as claimed in claim 15, wherein the spare area is an area in which the user data is re-recorded, or updated file system information is recorded when the user data recorded in a user data area has a defect.

Claim 20 (Currently Amended): The single recording layer write-once disc ~~of~~as claimed in claim 15, wherein the temporary disc management area is an area in which a temporary disc definition structure is recorded.

Claim 21 (Currently Amended): The single recording layer write-once disc ~~of~~as claimed in claim 15, wherein N is 4.

Claim 22 (Currently Amended): A dual recording layer write-once disc comprising:
a first recording layer on which user data is recorded using an opposite track path method; and
a second recording layer which comprises a data area,
wherein an area ranging from a predetermined position of the data area to the last position of the data area is allocated as a spare area which is divided into a sub spare area and a temporary disc management area from the outside in, and
wherein the size of the temporary disc management area is greater than or equal to $1/N$ (N is a real number) of the size of the spare area.

Claim 23 (Currently Amended): The dual recording layer write-once disc ~~as~~
claimed in claim 22, wherein the size of the temporary disc management area is less than or
equal to $1/N$ of the maximum size allocable to the spare area.

Claim 24 (Currently Amended): The dual recording layer write-once disc ~~as~~
claimed in claim 22, wherein the sub spare area is an area which is extended outward ~~to be less~~
~~than or equal to N times the size of the temporary disc management area~~ so that the sum of the
sizes of the extended sub spare area and the temporary disc management area is less than or
equal to N times the size of the temporary disc management area.

Claim 25 (Currently Amended): The dual recording layer write-once disc ~~as~~
claimed in claim 22, wherein the sub spare area is an area which is reduced inward.

Claim 26 (Currently Amended): The dual recording layer write-once disc ~~as~~
claimed in claim 22, wherein the spare area is an area in which the user data is re-recorded, or
updated file system information is recorded when the user data recorded in a user data area has
a defect.

Claim 27 (Currently Amended): The dual recording layer write-once disc ~~as~~
claimed in claim 22, wherein the temporary disc management area is an area in which a
temporary disc definition structure is recorded.

Claim 28 (Currently Amended): The dual recording layer write-once disc ~~as~~
claimed in claim 22, wherein N is 4.

Claim 29 (New): The method as claimed in claim 1, further
comprising extending the sub spare area in a direction opposite to that in which the user data is
recorded.

Claim 30 (New): The data recording and/or reproducing apparatus
as claimed in claim 8, the controller extends the sub spare area in a direction opposite to that in
which the user data is recorded.